PRIVATE FLYING



ECONOMICAL SPEED: The Valsts Elektrotechniska Fabrika J.12, for which Rollasons of Croydon are agents in this country. With an 80/90 Cirrus Minor engine this little two-seater cruises at 123 m.p.h. and has a maximum of 149 m.p.h. One or two minor modifications are being made to the later production machines in order to bring them into line with British C. of A. requirements. Among other interesting features the J.12 has manually applied split flaps and differentially operated slotted ailerons.

Topics of the Day

These Instruments

NE way and another the Air Ministry appears to be getting it hot and strong. Well, perhaps they deserve it. But practically every criticism could have been (and has been) levelled at them with Well, perhaps they equal fairness years and years ago. It is only when a system has to cope with rush-hour conditions that its faults become really obvious.

However, a more recent complaint, coming this time, more or less, from the "inside"—concerning the shortage of instruments for the new machines-interested me par-Production difficulties were blamed, when surely it would have been fairer to blame the Service experts themselves. The new Service blind-flying panel includes free gyro instruments, yet for years the R.A.F. would not consider any instrument of this type, and the entire blind-flying training system had been built up around the simple and reliable turn indicator. This must always be included in equipment, since no free gyro instrument can work in all attitudes, and since this type of instrument is necessarily more delicate in its operation.

During the past five years practically every transport machine has been fitted with the easily used horizon and gyro, and, more recently, with a sensitive altimeter. Although I have flown in comparatively few Service machines, I have yet to see any one of these instruments in the cockpit or control cabin. More recently I have seen gaps in the panels, which would presumably be filled in due course with such devices.

I am not very sure of the patent position in the matter of free gyro instruments, but certain it is that they cannot be mass produced and that you cannot suddenly ask for a couple of thousand directional gyros, or sensitive altimeters, and expect to have them delivered to-morrow or the day after. The R.A.F. did not previously want them, so nobody prepared to make them by the thousand for the two dozen transport machines which were being built every year.

Basic Training

NOT that I suggest for a moment that the standard blind-flying training technique was wrong in conception. To-day's ideas may be different, but at the time the methods were admirable and, even now, a man who has learnt to fly under the hood with a sensitive turn indicator, an eccentrically acting fore and aft level, and a compass possessed of the natural habits of its kind, should be able to cope with everything and anything.

My instrument-flying training has been erratic, incomplete and largely self-provided, but in its earlier stages it was carried out entirely on the instrumental equipment enumerated above. Yet from the very start I have had no trouble with the more complete equipment provided on transport aeroplanes-in fact, I have usually found it rather less difficult to fly such machines on the instruments alone, since there is no nose to speak of and the wing-tips are often somewhere out of sight in the back-

During my very first essay with a twin-engined type I had to take it up through a shallow cloud layer on two instruments which were then almost entirely new to mea gyro and an horizon. Nothing in the world seemed more easy, yet all my normal hood flying had been carried out in an oppressively self-heated atmosphere, and I always lifted the hood and sighed with relief to see the familiar horizon once again. The only part of transport blind-flying which can be considered in any way difficult or exhausting is that carried out during the last part of a blind approach—when real accuracy is essential and when several more instruments and so forth must be looked When complete transport training has really become commonplace, even that difficulty will be laughed

Crowded Out

THE fact that transport machines are, every year, becoming faster, bigger, and, consequently, less effectively manœuvrable, will make accuracy even more casential and traffic control more difficult.

It is all very well for us to skate around an aerodrome of which the far end can hardly be seen. Our little aeroplanes can, without hesitation, be thrown about or slipped away from obstructions. The pilot of a big transport must come in along a straight line, and if another machine, a chimney, or a hangar is in his way, he must do half a dozen things before he is ready to make a second round, and is certainly not able to make a steep

S-turn and to land straight off the last turn. Only a few days ago I found myself flying around an aerodrome with seven other machines, not one of them more than half a mile away. I had some difficulty in keeping two of the nearer ones in sight all the time. One of them tried to hide behind the centre-section tank, so that it was eventually necessary to close the throttle to prevent possible destruction; another lay in such a position that I had to lift the starboard wing-tip in order to peep at him now and again. At one moment three machines were converging in front of me, and it was difficult to resist the dangerous temptation to close the throttle and try to stop for a moment or two while the situation clarified itself.

The fact was that visibility was extremely poor, everyone was trying to keep the aerodrome boundary in view on the left, and the law of averages had ordained that all seven machines should be in the air in the same place and at the same moment. But the pilot for whom I felt